



Main

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| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Reversing contactor |
| Device short name | LC2D |
| Contactor application | Motor control Resistive load |
| Utilisation category | AC-1 AC-3 |
| Device presentation | Preassembled with reversing power busbar |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| System Voltage | <= 690 V AC 25...400 Hz power circuit <= 300 V DC power circuit |
| [Ie] rated operational current | 25 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit 9 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit |
| Motor power kW | 4 kW at 380...400 V AC 50/60 Hz 2.2 kW at 220...230 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 5.5 kW at 660...690 V AC 50/60 Hz 4 kW at 415...440 V AC 50/60 Hz |
| Motor power hp | 0.5 hp at 115 V AC 50/60 Hz 1 phase motors 1 hp at 230/240 V AC 50/60 Hz 1 phase motors 2 hp at 200/208 V AC 50/60 Hz 3 phases motors 2 hp at 230/240 V AC 50/60 Hz 3 phases motors 5 hp at 460/480 V AC 50/60 Hz 3 phases motors 7.5 hp at 575/600 V AC 50/60 Hz 3 phases motors |
| Control circuit type | DC low consumption |
| [Uc] control circuit voltage | 24 V DC |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 25 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit |
| Irms rated making capacity | 250 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1 |
| Rated breaking capacity | 250 A at 440 V power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 105 A <= 104 °F (40 °C) 10 s power circuit 210 A <= 104 °F (40 °C) 1 s power circuit 30 A <= 104 °F (40 °C) 10 min power circuit 61 A <= 104 °F (40 °C) 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit |
| Associated fuse rating | 20 A gG at <= 690 V coordination type 2 power circuit 25 A gG at <= 690 V coordination type 1 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1 |

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| Average impedance | 2.5 mOhm at 50 Hz - Ith 25 A power circuit |
| [Ui] rated insulation voltage | 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL |
| Electrical durability | 0.6 Mcycles 25 A AC-1 at $U_e \leq 440$ V 2 Mcycles 9 A AC-3 at $U_e \leq 440$ V |
| Power dissipation per pole | 0.2 W AC-3 1.56 W AC-1 |
| Protective cover | With |
| Interlocking type | Mechanical |
| Mounting support | Plate Rail |
| Standards | UL 508 CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 |
| Product certifications | BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL |
| Connections - terminals | Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end |
| Tightening torque | Power circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 |
| Operating time | 65.45...88.55 ms closing |

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|--------------------------|--|
| | 20...30 ms opening |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 30 Mcycles |
| Operating rate | 3600 cyc/h at <= 140 °F (60 °C) |

Complementary

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|--------------------------------|--|
| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.1...0.3 U _c drop-out at 140 °F (60 °C), DC 0.8...1.25 U _c operational at 140 °F (60 °C), DC |
| Time constant | 40 ms |
| Inrush power in W | 2.4 W at 68 °F (20 °C) |
| Hold-in power consumption in W | 2.4 W at 68 °F (20 °C) |
| Auxiliary contacts type | Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1 |
| Signalling circuit frequency | 25...400 Hz |
| Minimum switching current | 5 mA signalling circuit |
| Minimum switching voltage | |
| Non-overlap time | 1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact) |
| Insulation resistance | > 10 MOhm signalling circuit |

Environment

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|---|--|
| IP degree of protection | IP20 front face conforming to IEC 60529 |
| protective treatment | TH conforming to IEC 60068-2-30 |
| pollution degree | 3 |
| ambient air temperature for operation | -4...140 °F (-20...60 °C) |
| ambient air temperature for storage | -76...176 °F (-60...80 °C) |
| permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at U _c |
| operating altitude | 9842.52 ft (3000 m) without derating in temperature |
| fire resistance | 1562 °F (850 °C) conforming to IEC 60695-2-1 |
| flame retardance | V1 conforming to UL 94 |
| mechanical robustness | Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms |
| height | 3.03 in (77 mm) |
| width | 3.54 in (90 mm) |
| depth | 3.74 in (95 mm) |
| product weight | 2.24 lb(US) (1.017 kg) |

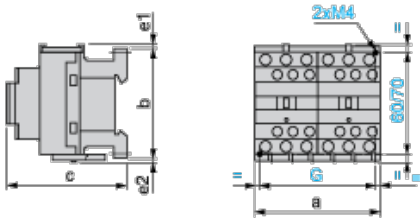
Offer Sustainability

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|---|---|
| Green Premium product | Green Premium product |
| Compliant - since 0721 - Schneider Electric declaration of conformity | Compliant - since 0721 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold | Reference not containing SVHC above the threshold |
| Available | Available |
| Available | Available |

Contractual warranty

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|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

Dimensions

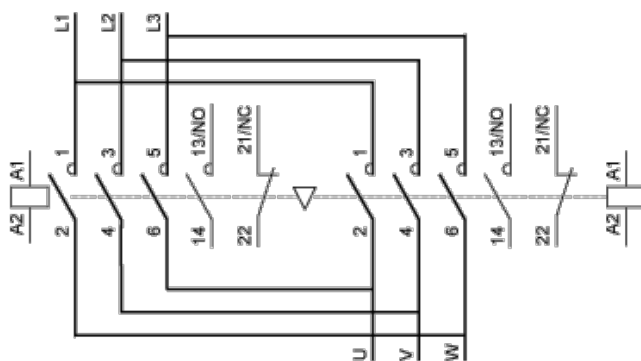


| LC2 or 2 x LC1 | a | b | c ⁽¹⁾ | e1 | e2 | G |
|-------------------|----|----|------------------|----|-----|----|
| D09 to D18 (AC) | 90 | 77 | 86 | 4 | 1.5 | 80 |
| D093 to D123 (AC) | 90 | 99 | 86 | – | – | 80 |
| D09 to D18 (DC) | 90 | 77 | 95 | 4 | 1.5 | 80 |
| D093 to D123 (DC) | 90 | 99 | 95 | – | – | 80 |
| D25 to D38 (AC) | 90 | 85 | 92 | 9 | 5 | 80 |
| D183 to D383 (AC) | 90 | 99 | 92 | – | – | 80 |
| D25 to D32 (DC) | 90 | 85 | 101 | 9 | 5 | 80 |
| D183 to D383 (DC) | 90 | 99 | 101 | – | – | 80 |







e1 and e2: including cabling.













(1) With safety cover, without add-on block.

Wiring



Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power from 0,06 to 4 kW and 415 VAC

| Motor Power (kW) | Icu (kA) | Breaker | Contactor |
|------------------|----------|--|---|
| 0.06 | > 100 |  GV2ME02 |  LC2D09BL |
| 0.09 | > 100 |  GV2ME03 |  LC2D09BL |
| 0,12 to 0,18 | > 100 |  GV2ME04 |  LC2D09BL |

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|--------------|-------|---|--|
| 0,25 to 0,37 | > 100 |  GV2ME05 |  LC2D09BL |
| 0.55 | > 100 |  GV2ME06 |  LC2D09BL |
| 0.75 | > 100 |  GV2ME07 |  LC2D09BL |
| 1,1 to 1,5 | > 100 |  GV2ME08 |  LC2D09BL |
| 2.2 | > 100 |  GV2ME10 |  LC2D09BL |
| 3 to 4 | > 100 |  GV2ME14 |  LC2D09BL |

Non contractual pictures. Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.